

REMARKS/ARGUMENTS

Re-examination and favorable reconsideration in light of the following comments are respectfully requested.

Claims 37 - 82 are pending in the application. Currently, all claims stand rejected.

In the office action mailed December 23, 2008, the Examiner provisionally rejected claims 37 - 45, 48, 52, 58, 59, and 66 - 81 on the ground of non-statutory obviousness type double patenting over claims 32 - 39, 53, 56 - 69, and 72 - 73 of co-pending application no. 10/542,935; claims 37 - 79 were rejected under 35 U.S.C. 112, second paragraph as being indefinite; claims 37 - 63, 65 - 71, 76, and 80 - 82 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO 2001/068355 to Dambricourt in view of U.S. Patent No. 5,314,746 to Johnson et al.; claims 64, 77, and 79 were rejected under 35 U.S.C. 103(a) as being unpatentable over Dambricourt in view of Johnson et al. and further in view of U.S. Patent No. 5,372,863 to Nishikawa; and claims 73 - 75 were rejected under 35 U.S.C. 103(a) as being unpatentable over Dambricourt in view of Johnson et al. and further in view of WO 2001/094213 to Doherty et al.

The foregoing rejections are traversed by the instant response.

With regard to the provisional obviousness type double patenting rejection, it is submitted that the claims of the instant application differ from the claims of the co-pending application serial number 10/542,535 in a way which is patentably distinct. The '535 application concerns a fully emptiable flexible tube with an amplified return effect. However, the claims of the '535 application do not mention a flexible tube which is both resistant to stress-cracking and forming a strong water barrier. There is

nothing in the claims of the '535 application which would lead one of ordinary skill in the art to arrive at an equation for creating conditions of dispersion of the flexible modulus of the constituents of a resin composition (in other words, the dispersion factor K_d), which leads to a compromise to be made between the need to reduce weight loss and the need to impart flexibility of the tube, thus allowing easy, pleasant use thereof. The Examiner has averred that the equation present in the instant application would be inherent; however, the Examiner has not provided any extrinsic evidence to support such a conclusion. In particular, the Examiner has not shown that the physical property is actually present in the claimed subject matter and that even if it were present, how the equation is inherent. As for the obviousness argument, the Examiner has not provided any articulated line of reasoning with a rational underpinning which would support the legal conclusion of obviousness. The Examiner must do more than just state the conclusion. Conclusory statements are insufficient to establish obviousness.

With respect to the rejection on indefiniteness grounds, Applicant submits that there is nothing indefinite about the claims. With respect to the Examiner's comments in paragraph 5 of the office action, Applicant believe that claim 37 is clear that K_d should be lower or equal to 3 if the mixture contains polyethylene and K_d should be lower or equal to 2.2 if the mixture does not contain polyethylene. In all conditions, K_d should be lower or equal to 3.

With regard to paragraph 6 of the office action, claim 49 refers to claim 48 which deals with the MFI of the linear copolymer of ethylene-olefin, while claims 54 and 55 deal with the MFI of the polymer belonging to the

polypropylene family. Thus, the specified limits do not apply to the same chemical species.

With respect to paragraph 7 of the office action, the phrase "centrifugal radial tension" refers to "radial expansion."

With respect to the rejection of claims 37 - 63, 65 - 71, 76, and 80 - 81 over the combination of Dambricourt in view of Johnson et al., it is respectfully submitted that the combination of references does not render the claimed invention obvious.

Dambricourt discloses a flexible tube comprising a wall made of C₄ - C₁₀ linear ethylene-olefin copolymer or a mixture of C₄ - C₁₀ linear olefin copolymers. The tube of Dambricourt is resistant to stress-cracking and impermeable to water vapor. The polymer mixture, which forms the wall of this tube, does not comprise any polypropylene.

Johnson et al. notably describes films produced by copolymers of propylene and with from 3 to 47 weight percent ethylene. According to the specification of this document on column 8, lines 16 to 20, the flexural modulus of said copolymers can range from 20,000 psi to 100,000 psi and, preferably from 40,000 psi, i.e. between 137.8 MPa and 689.7 Mpa, and preferably between 275.9 MPa and 482.8 MPa. However, Johnson et al. remains silent about the conditions of dispersion of the flexural resin composition (in other words, the dispersion factor Kd) and the water-barrier properties of the films.

As discussed in Applicant's prior response, it is far from obvious that one of ordinary skill in the art would have combined the teachings of Dambricourt with the teachings of Johnson et al. to arrive at the tube of the present invention. There is no incentive for one of

ordinary skill in the art to use one of the polypropylenes of the compositions of Johnson et al. in the polymer mixture of Dambricourt, since polypropylenes typically present a low water-barrier, generally lower than that of polyethylenes (see paragraph [0025] of the substitute specification). Furthermore, the high rigidity of polypropylene (in general much higher than that of polyethylene) should, in principle, limit its use for the fabrication of flexible tubes (see paragraph [0023] of the substitute specification).

Indeed, there is absolutely no incentive in the references for one of ordinary skill in the art to imagine an equation for perfecting the conditions of dispersion of the flexural modulus values of the constituents of a resin composition (in other words, the dispersion factor K_d) which leads to a compromise to be made between the need to impart flexibility to the tube (see the substitute specification on page 17, paragraph [0102]) and the need to reduce weight loss. Contrary to the opinion of the Examiner, the equation presented in claim 37 is a constraint and not a result as shown by the examples in the specification in the instant application. The examples clearly show that the equation gives the rule for mixing the components of the mixture in order to form a flexible tube made of polypropylene having a strong water barrier. It is submitted that this makes the claimed invention non-obvious over the cited and applied references. It is thus requested that the rejection be withdrawn.

Claims 38 - 63, 65 - 71, 76, and 80 - 81 are allowable for the same reasons as claim 37 as well as on their own accord.

With regards to the other obviousness rejections in the application, the tertiary references to Nishikawa and Doherty do not cure the aforementioned deficiencies of Dambricourt and Johnson et al. With regard to Nishikawa, it should be noted that it discloses a laminate tube having a shoulder with improved barrier properties, characterized in that the shoulder comprises a material composed of: (A) 0 to 50 wt% of polyethylene; (B) 10 to 50 wt% of an ethylene-vinyl alcohol copolymer or a saponified ethylene-vinyl acetate copolymer, and (C) 10 to 90 wt% of a carboxylic acid-modified adhesive polyethylene resin. The material of the shoulder does not comprise polypropylene.

Claims 64, 73 - 75, 77, and 79 are allowable for the same reasons as their parent claims as well as on their own accord.

For these reasons, the instant application is believed to be in condition for allowance. Such allowance is respectfully solicited.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, he is hereby invited to contact Applicant's attorney at the telephone number listed below.

A three month request for an extension of time is enclosed herewith. The Director is hereby authorized to charge the extension of time fee in the amount of \$1,110.00 to Deposit Account No. 02-0184.

If the Director determines that an additional fee is due, he is hereby authorized to charge said fee to said Deposit Account No. 02-0184.

Respectfully submitted,

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